

EXHIBIT 15



SEARCH



Entire Site

TOPICS

PUBLICATIONS & DATABASES

RESEARCH & PRACTICE

EDUCATION & CAREER

NEWS & ADVOCACY

Home > Psychology topics > Social media and the internet >

Health advisory on social media use in adolescence



NEW REPORT

Potential risks of content, features, and functions: The science of how social media affects youth

Almost a year after APA issued its health advisory on social media use in adolescence, society continues to wrestle with ways to maximize the benefits of these platforms while protecting youth from the potential harms associated with them

Psychological scientists examine potential beneficial and harmful effects of social media^a use on adolescents' social, educational, psychological, and neurological development. This is a rapidly evolving and growing area of research with implications for many stakeholders (e.g., youth, parents, caregivers, educators, policymakers, practitioners, and members of the tech industry) who share responsibility to ensure adolescents' well-being.^b **Officials and policymakers including the U.S. Surgeon General Dr. Vivek Murthy have documented the importance of this issue and are actively seeking science-informed input.^c**

The recommendations below are based on the scientific evidence to date, and the following considerations.

A. Using social media is not inherently beneficial or harmful to young people. Adolescents' lives online both reflect and impact their offline lives. In most cases, the effects of social media are dependent on adolescents' own personal and psychological characteristics and social circumstances—intersecting with the specific content, features, or functions that are afforded within many social media platforms. In other words, the effects of social media likely depend on what teens can do and see online, teens' preexisting strengths or vulnerabilities, and the contexts in which they grow up.³

B. Adolescents' experiences online are affected by both 1) how they shape their own social media experiences (e.g., they choose whom to like and follow); and 2) both visible and unknown features built into social media platforms.

C. Not all findings apply equally to all youth. Scientific findings offer one piece of information that

**DOWNLOAD IN PDF FORMAT
(435KB)**

RECOMMENDED READING



CHILDREN'S BOOK
How to Handle STRESS for Middle School Success

\$16.99



CHILDREN'S BOOK
How to NAVIGATE Middle School

\$16.99

Recommendations

4 of 12

1. Youth using social media should be encouraged to use functions that create opportunities for social support, online companionship, and emotional intimacy that can promote healthy socialization

Data suggest that youths' psychological development may benefit from this type of online social interaction, particularly during periods of social isolation, when experiencing stress, when seeking connection to peers with similar developmental and/or health conditions, and perhaps especially for youth who experience adversity or isolation in offline environments.^{12, 13,14,15}

Youth with symptoms of mental illness, such as adolescents with social anxiety, depression, or loneliness, for instance, may benefit from interactions on social media that allow for greater control, practice, and review of social interactions.¹⁶ Unfortunately, these populations may also be at higher risk for some of the negative facets of social media use as discussed below.¹⁷

Social media offers a powerful opportunity for socialization of specific attitudes and behaviors, encouraging adolescents to follow the opinions and prosocial acts of others.¹⁸ The discussion of healthy behaviors online can promote or reinforce positive offline activity and healthy outcomes.

Social media may be psychologically beneficial particularly among those experiencing mental health crises,¹⁹ or members of marginalized groups that have been disproportionately harmed in online contexts. For instance, access to peers that allows LGBTQIA+ and questioning adolescents to provide support to and share accurate health information with one another is beneficial to psychological development, and can protect youth from negative psychological outcomes when experiencing stress.²⁰ This may be especially important for topics that adolescents feel reluctant to or are unable to discuss with a parent or caregiver.



2. Social media use, functionality, and permissions/consenting should be tailored to youths' developmental capabilities; designs created for adults may not be appropriate for children.

Specific features (e.g., the "like" button, recommended content, unrestricted time limits, endless scrolling) and notices/alerts (e.g., regarding changes to privacy policies) should be tailored to the social and cognitive abilities and comprehension of adolescent users.²¹ As one example, adolescents should be informed explicitly and repeatedly, in age-appropriate ways, about the manner in which their behaviors on social media may yield data that can be used, stored, or shared with others, for instance, for commercial (and other) purposes.

3. In early adolescence (i.e., typically 10–14 years), adult monitoring (i.e., ongoing review, discussion, and coaching around social media content) is advised for most youths' social media use; autonomy may increase gradually as kids age and if they gain digital literacy skills. However, monitoring should be balanced with youths' appropriate needs for privacy.

Brain regions associated with a desire for attention, feedback, and reinforcement from peers become increasingly sensitive beginning in early adolescence, and regions associated with mature self-control are not fully developed until adulthood.⁵ Parental monitoring (i.e., coaching and discussion) and developmentally appropriate limit-setting thus is critical, especially in early adolescence.

Adults' own use of social media in youths' presence should also be carefully considered. Science demonstrates that adults' (e.g., caregivers') orientation and attitudes toward social media (e.g., using during interactions with their children, being distracted from in-person interactions by social media use) may affect adolescents' own use of social media.

Speaking of Psychology

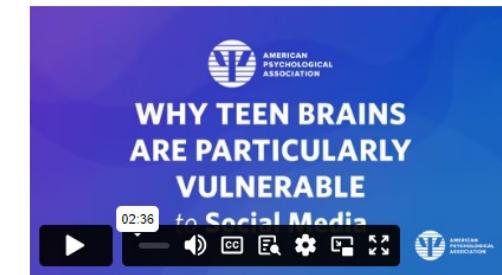
Subscribe to APA's audio podcast series highlighting some of the most important and relevant psychological research being conducted today.

Subscribe to *Speaking of Psychology* and download via:

Apple



Spotify



Six Things Psychologists are Talking About

The *APA Monitor on Psychology*® sister e-newsletter offers fresh articles on psychology trends, new research, and more.

First Name *

Last Name *

Email Address *



4. To reduce the risks of psychological harm, adolescents' exposure to content on social media that depicts illegal or psychologically maladaptive behavior, including content that instructs or encourages youth to engage in health-risk behaviors, such as self-harm (e.g., cutting, suicide), harm to others, or those that encourage eating-disordered behavior (e.g., restrictive eating, purging, excessive exercise) should be minimized, reported, and removed;²³ moreover, technology should not drive users to this content.

Evidence suggests that exposure to maladaptive behavior may promote similar behavior among vulnerable youth, and online social reinforcement of these behaviors may be related to increased risk for serious psychological symptoms, even after controlling for offline influences.²⁴

Reporting structures should be created to easily identify harmful content, and ensure it is deprioritized or removed.

5. To minimize psychological harm, adolescents' exposure to "cyberhate" including online discrimination, prejudice, hate, or cyberbullying especially directed toward a marginalized group (e.g., racial, ethnic, gender, sexual, religious, ability status),²² or toward an individual because of their identity or allyship with a marginalized group should be minimized.

Research demonstrates that adolescents' exposure to online discrimination and hate predicts increases in anxiety and depressive symptoms, even after controlling for how much adolescents are exposed to similar experiences offline.²⁵ Similarly, research indicates that as compared to offline bullying, online bullying and harassment can be more severe, and thus damaging to psychological development.²⁶⁻²⁸ In other words, both online cyberhate and offline bullying can increase risk for adolescent mental health problems. Research suggests elevated risks both for the perpetrators and victims of cyberhate.^{29,30}

Adolescents should be trained to recognize online structural racism and critique racist messages. Research shows that young people who are able to critique racism experience less psychological distress when they witness race-related traumatic events online.²⁵ As noted above, adults' monitoring and active discussion of online content can also reduce the effects of exposure to cyberhate on adolescents' psychological adjustment.²²



6. Adolescents should be routinely screened for signs of “problematic social media use” that can impair their ability to engage in daily roles and routines, and may present risk for more serious psychological harms over time.

Indicators of problematic social media use include

- a tendency to use social media even when adolescents want to stop, or realize it is interfering with necessary tasks
- spending excessive effort to ensure continuous access to social media
- strong cravings to use social media, or disruptions in other activities from missing social media use too much
- repeatedly spending more time on social media than intended
- lying or deceptive behavior to retain access to social media use
- loss or disruption of significant relationships or educational opportunities because of media use³¹

Social media use should not restrict opportunities to practice in-person reciprocal social interactions, and should not contribute to psychological avoidance of in-person social interactions.

7. The use of social media should be limited so as to not interfere with adolescents' sleep and physical activity.

Research recommends adolescents get at least eight hours of sleep each night³² and maintain regular sleep-wake schedules. Data indicate that technology use particularly within one hour of bedtime, and social media use in particular, is associated with sleep disruptions.^{33,34} Insufficient sleep is associated with disruptions to neurological development in adolescent brains, teens' emotional functioning,^{35,36} and risk for suicide.^{37,38}

Adolescents' social media use also should not interfere with or reduce adolescents' opportunities for physical activity and exercise.³⁹ Research demonstrates that physical activity is essential for both physical and psychological health (i.e., lower rates of depression).⁴⁰



8. Adolescents should limit use of social media for social comparison, particularly around beauty- or appearance-related content.

Research suggests that using social media for social comparisons related to physical appearance, as well as excessive attention to and behaviors related to one's own photos and feedback on those photos, are related to poorer body image, disordered eating, and depressive symptoms, particularly among girls.^{41,42,43,44,45,46}

9. Adolescents' social media use should be preceded by training in social media literacy to ensure that users have developed psychologically-informed competencies and skills that will maximize the chances for balanced, safe, and meaningful social media use.

Emerging science offers preliminary support for the efficacy of Digital Citizenship and Digital Literacy⁴⁷ to increase the frequency of positive interactions online; however, more research is needed in this area.⁴⁸

Additional competencies could also include:

- questions about the safety and potential risks of social media use
- understanding the tactics used to spread mis- and disinformation
- limiting “overgeneralization” and “misestimation” errors that lead users to incorrectly estimate others’ behaviors or attitudes based on social media content (or reactions to content)
- signs of problematic social media use
- how to build and nourish healthy online relationships
- how to solve conflicts that can emerge on social media platforms
- how to refrain from excessive social comparisons online and/or better understand how images and content can be manipulated
- how to recognize online structural racism and critique racist messages
- how to safely communicate about mental health online⁴⁹



10. Substantial resources should be provided for continued scientific examination of the positive and negative effects of social media on adolescent development.

A substantial investment in research funding is needed, including long-term longitudinal research, studies of younger children, and research on marginalized populations.

Access to data among independent scientists (including data from tech companies) to more thoroughly examine the associations between social media use and adolescent development is needed.

APA related resources



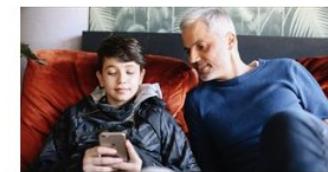
PRESS RELEASE

APA panel issues recommendations for adolescent social media use



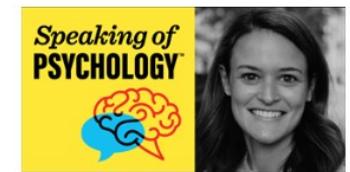
TIP SHEET

Keeping teens safe on social media: What parents should know to protect their kids



Q&A

How to teach social media literacy to teens: A Q&A with Mitch Prinstein, PhD



PODCAST

How social media affects teens' mental health, with Jacqueline Nesi, PhD

Expert advisory panel Co-chairs

- Mary Alvord, PhD, director, Alvord, Baker & Associates; board president, Resilience Across Borders; adjunct associate professor of psychiatry and behavioral sciences, The George Washington University School of Medicine and Health Sciences
- Mitchell J. Prinstein, PhD, ABPP, chief science officer, American Psychological Association; John Van Seters Distinguished Professor of Psychology and Neuroscience, University of North Carolina at Chapel Hill

Members

- Mary K. Alvord, PhD, director, Alvord, Baker & Associates; board president, Resilience Across Borders; adjunct associate professor of psychiatry and behavioral sciences, The George Washington University School of Medicine and Health Sciences
- Dawn T. Bounds, PhD, PMHNP-BC, FAAN, assistant professor, Sue & Bill Gross School of Nursing, University of California, Irvine
- Linda Charmaraman, PhD, Wellesley Centers for Women, Wellesley College
- Sophia Choukas-Bradley, PhD, assistant professor, Department of Psychology, University of Pittsburgh
- Dorothy L. Espelage, PhD, William C. Friday Distinguished Professor of Education, University of North Carolina at Chapel Hill
- Joshua A. Goodman, PhD, assistant professor, Department of Psychology, Southern Oregon University
- Jessica L. Hamilton, PhD, assistant professor, Department of Psychology, Rutgers University
- Jacqueline Nesi, PhD, assistant professor, Department of Psychiatry and Human Behavior, Alpert Medical School of Brown University
- Brendesha M. Tynes, PhD, Dean's Professor of Educational Equity, University of Southern California
- L. Monique Ward, PhD, professor, Department of Psychology (Developmental), University of Michigan
- Lucía Magis-Weinberg, MD, PhD, assistant professor, Department of Psychology, University of Washington

Acknowledgements

We wish to acknowledge the outstanding contributions to this report made by Corbin Evans, JD, senior director of congressional and federal relations, American Psychological Association.

Selected publications and resources

1. Nesi, J., Choukas-Bradley, S., & Prinstein, M. J. (2018). Transformation of adolescent peer relations in the social media context: Part 1—A theoretical framework and application to dyadic peer relationships. *Clinical Child and Family Psychology Review*, 21(3), 267-294. <https://doi.org/10.1007/s10567-018-0261-x>
2. Nesi, J., Dredge, R., Maheux, A. J., Roberts, S. R., Fox, K. A., & Choukas-Bradley, S. (2023). Peer experiences via social media. In B. Halpern-Felsher (Ed.), *Encyclopedia of Child and Adolescent Health* (pp. 182-195). Academic Press. <https://doi.org/10.1016/B978-0-12-818872-9.00046-7>
3. Prinstein, M. J., Nesi, J., & Telzer, E. H. (2020). Commentary: An updated agenda for the study of digital media use and adolescent development—Future directions following Odgers & Jensen (2020). *Journal of Child Psychology and Psychiatry*, 61(3), 349-352. <https://doi.org/10.1111/jcpp.13219>
4. Valkenburg, P. M., & Peter, J. (2013). The differential susceptibility to media effects model. *Journal of Communication*, 63(2), 221-243. <https://doi.org/10.1111/jcom.12024>
5. Somerville, L. H., & Casey, B. J. (2010). Developmental neurobiology of cognitive control and motivational systems. *Current Opinion in Neurobiology*, 20(2), 236-241. <https://doi.org/10.1016/j.conb.2010.01.006>
6. Orben, A., & Blakemore, S.-J. (2023). How social media affects teen mental health: A missing link. *Nature*, 614(7948), 410-412. <https://doi.org/10.1038/d41586-023-00402-9>

7. Magis-Weinberg, L., Domoff, S. E., & Dahl, R. (2021). Developmental windows of social media: Implications for very young adolescents in LMICs. *Frontiers in Psychology*, 12, Article 632713. <https://doi.org/10.3389/fpsyg.2021.632713>

8. Orben, A., Przybylski, A. K., Blakemore, S.-J., Kievit, R. A. (2022). Windows of developmental sensitivity to social media. *Nature Communications*, 13(1649). <https://doi.org/10.1038/s41467-022-29296-3>

9. Noble, S. U. (2018). *Algorithms of oppression: How search engines reinforce racism*. New York University Press. <https://doi.org/10.18574/nyu/9781479833641.001.0001>

10. Relia, K., Li, Z., Cook, S. H., & Chunara, R. (2019). Race, ethnicity and national origin-based discrimination in social media and hate crimes across 100 U.S. cities. *Proceedings of the International AAAI Conference on Web and Social Media*, 13, 417-427. <https://doi.org/10.1609/icwsm.v13i01.3354>

11. Tynes, B. M., Willis, H. A., Stewart, A. M., & Hamilton, M. W. (2019). Race-related traumatic events online and mental health among adolescents of color. *The Journal of Adolescent Health*, 65(3), 371-377. <https://doi.org/10.1016/j.jadohealth.2019.03.006>

12. Charmaraman, L., Lynch, A. D., Richer, A. M., & Zhai, E. (2022). Examining early adolescent positive and negative social technology behaviors and well-being during the COVID-19 pandemic. *Technology, Mind, and Behavior*, 3(1). <https://doi.org/10.1037/tmb0000062>

13. Magis-Weinberg, L., Gys, C. L., Berger, E. L., Domoff, S. E., & Dahl, R. E. (2021). Positive and negative online experiences and loneliness in Peruvian adolescents during the COVID-19 lockdown. *Journal of Research on Adolescence*, 31(3), 717-733. <https://doi.org/10.1111/jora.12666>

14. Psihogios, A. M., Ahmed, A. M., McKelvey, E. R., Toto, D., Avila, I., Hekimian-Brogan, E., Steward, Z., Schwartz, L. A., & Barakat, L. P. (2022). Social media to promote treatment adherence among adolescents and young adults with chronic health conditions: A topical review and TikTok application. *Clinical Practice in Pediatric Psychology*, 10(4), 440-451. <https://doi.org/10.1037/cpp0000459>

15. Holtz, B. E., & Kanthawala, S. (2020). #T1DLooksLikeMe: Exploring self-disclosure, social support, and Type 1 diabetes on Instagram. *Frontiers in Communication*, 5. <https://doi.org/10.3389/fcomm.2020.510278>

16. Reid Chassiakos, Y. (L.), Radesky, J., Christakis, D., Moreno, M. A., Cross, C., & Council on Communications and Media. (2016). Children and adolescents and digital media. *Pediatrics*, 138(5), Article e20162593. <https://doi.org/10.1542/peds.2016-2593>

17. Nesi, J., Mann, S. and Robb, M. B. (2023). *Teens and mental health: How girls really feel about social media*. San Francisco, California: Common Sense

18. Armstrong-Carter, E., & Telzer, E. H. (2021). Advancing measurement and research on youths' prosocial behavior in the digital age. *Child Development Perspectives*, 15(1), 31-36. <https://doi.org/10.1111/cdep.12396>

19. Massing-Schaffer, M., Nesi, J., Telzer, E. H., Lindquist, K. A., & Prinstein, M. J. (2022). Adolescent peer experiences and prospective suicidal ideation: The protective role of online-only friendships. *Journal of Clinical Child and Adolescent Psychology*, 51(1), 49-60. <https://doi.org/10.1080/15374416.2020.1750019>

20. Craig, S. L., Eaton, A. D., McInroy, L. B., Leung, V. W. Y., & Krishnan, S. (2021). Can social media participation enhance LGBTQ+ youth well-being? Development of the Social Media Benefits Scale. *Social Media + Society*, 7(1), 205630512198893. <https://doi.org/10.1177/2056305121988931>

21. *Introduction to the Age appropriate design code | ICO*. (n.d.). Retrieved April 20, 2023, from <https://ico.org.uk/for-organisations/guide-to-data-protection/ico-codes-of-practice/age-appropriate-design-code/>

22. Wachs, S., Costello, M., Wright, M. F., Flora, K., Daskalou, V., Maziridou, E., Kwon, Y., Na, E.-Y., Sittichai, R., Biswal, R., Singh, R., Almendros, C., Gámez-Guadix, M., Görzig, A., & Hong, J. S. (2021). "DNT LET 'EM H8 U!": Applying the routine activity framework to understand cyberhate victimization among adolescents across eight countries. *Computers & Education*, 160, Article 104026. <https://doi.org/10.1016/j.compedu.2020.104026>

23. Tools and tips to help communicate safely online about suicide - #chatsafe - Orygen, Revolution in Mind. (n.d.). Retrieved April 20, 2023, from <https://www.orygen.org.au/chatsafe>.

24. Nesi, J., Rothenberg, W. A., Hussong, A. M., & Jackson, K. M. (2017). Friends' alcohol-related social networking site activity predicts escalations in adolescent drinking: Mediation by peer norms. *Journal of Adolescent Health*, 60(6), 641-647. <https://doi.org/10.1016/j.jadohealth.2017.01.009>

25. Tynes, B., Cao, J., & Mays, R. (2008). The relationship between racial discrimination and psychological adjustment among adolescents. *Journal of Adolescent Health, 43*(6), 565-569. <https://doi.org/10.1016/j.jadohealth.2008.08.021>

26. Mitchell, K. J., Ybarra, M. L., Jones, L. M., & Espelage, D. (2016). What features make online harassment incidents upsetting to youth? *Journal of School Violence, 15*(3), 279-301. <https://doi.org/10.1080/15388220.2014.990462>

27. Li, C., Wang, P., Martin-Moratinos, M., Bella-Fernández, M., & Blasco-Fontecilla, H. (2022). Traditional bullying and cyberbullying in the digital age and its associated mental health problems in children and adolescents: A meta-analysis. *European Child & Adolescent Psychiatry, Advance online publication*. <https://doi.org/10.1007/s00787-022-02128-x>

28. Gini, G., & Espelage, D. L. (2014). Peer victimization, cyberbullying, and suicide risk in children and adolescents. *JAMA: Journal of the American Medical Association, 312*(5), 545-546. <https://doi.org/10.1001/jama.2014.3212>

29. Fulantelli, G., Taibi, D., Scifo, L., Schwarze, V., & Eimler, S. C. (2022). Cyberbullying and cyberhate as two interlinked instances of cyber-aggression in adolescence: A systematic review. *Frontiers in Psychology, 13*. <https://doi.org/10.3389/fpsyg.2022.909299>

30. Castaño-Pulgarín, S. A., Suárez-Betancur, N., Vega, L. M. T., & López, H. M. H. (2021). Internet, social media and online hate speech. Systematic review. *Aggression and Violent Behavior, 58*, Article 101608. <https://doi.org/10.1016/j.avb.2021.101608>

31. Boer, M., Stevens, G. W. J. M., Finkenauer, C., & van den Eijnden, R. J. J. M. (2022). The course of problematic social media use in young adolescents: A latent class growth analysis. *Child Development, 93*(2), e168-e187. <https://doi.org/10.1111/cdev.13712>

32. Paruthi, S., Brooks, L. J., D'Ambrosio, C., Hall, W. A., Kotagal, S., Lloyd, R. M., Malow, B. A., Maski, K., Nichols, C., Quan, S. F., Rosen, C. L., Troester, M. M., & Wise, M. S. (2016). Recommended amount of sleep for pediatric populations: A consensus statement of the American Academy of Sleep Medicine. *Journal of Clinical Sleep Medicine, 12*(6), 785-786. <https://doi.org/10.5664/jcsm.5866>

33. Alonzo, R., Hussain, J., Stranges, S., & Anderson, K. K. (2021). Interplay between social media use, sleep quality, and mental health in youth: A systematic review. *Sleep Medicine Reviews, 56*, Article 101414. <https://doi.org/10.1016/j.smrv.2020.101414>

34. Hamilton, J. L., Chand, S., Reinhardt, L., Ladouceur, C. D., Silk, J. S., Moreno, M., Franzen, P. L., & Bylsma, L. M. (2020). Social media use predicts later sleep timing and greater sleep variability: An ecological momentary assessment study of youth at high and low familial risk for depression. *Journal of Adolescence, 83*, 122-130. <https://doi.org/10.1016/j.adolescence.2020.07.009>

35. Perrault, A. A., Bayer, L., Peuvrier, M., Afyouni, A., Ghisletta, P., Brockmann, C., Spiridon, M., Vesely, S. H., Haller, D. M., Pichon, S., Perrig, S., Schwartz, S., & Sterpenich, V. (2019). Reducing the use of screen electronic devices in the evening is associated with improved sleep and daytime vigilance in adolescents. *Sleep: Journal of Sleep and Sleep Disorders Research, 42*(9), 1-10. <https://doi.org/10.1093/sleep/zsz125>

36. Telzer, E. H., Goldenberg, D., Fuligni, A. J., Lieberman, M. D., & Gálvan, A. (2015). Sleep variability in adolescence is associated with altered brain development. *Developmental Cognitive Neuroscience, 14*, 16-22. <https://doi.org/10.1016/j.dcn.2015.05.007>

37. Hamilton, J. L., Tsypes, A., Zelazny, J., Sewall, C. J. R., Rode, N., Merranko, J., Brent, D. A., Goldstein, T. R., & Franzen, P. L. (2023). Sleep influences daily suicidal ideation through affective reactivity to interpersonal events among high-risk adolescents and young adults. *Journal of Child Psychology and Psychiatry, 64*(1), 27-38. <https://doi.org/10.1111/jcpp.13651>

38. Liu, R. T., Steele, S. J., Hamilton, J. L., Do, Q. B. P., Furbish, K., Burke, T. A., Martinez, A. P., & Gerlus, N. (2020). Sleep and suicide: A systematic review and meta-analysis of longitudinal studies. *Clinical Psychology Review, 81*, Article 101895. <https://doi.org/10.1016/j.cpr.2020.101895>

39. Shimoga, S. V., Erlyana, E., & Rebello, V. (2019). Associations of social media use with physical activity and sleep adequacy among adolescents: Cross-sectional survey. *Journal of Medical Internet Research, 21*(6), Article e14290. <https://doi.org/10.2196/14290>

40. Bustamante, E. E., Santiago-Rodríguez, M. E., & Ramer, J. D. (2023). Unlocking the promise of physical activity for mental health promotion. *JAMA Pediatrics, 177*(2), 111-113. <https://doi.org/10.1001/jamapediatrics.2022.5096>

41. Nesi, J., Miller, A. B., & Prinstein, M. J. (2017). Adolescents' depressive symptoms and subsequent technology-based interpersonal behaviors: A multi-wave study. *Journal of Applied Developmental Psychology, 51*, 12-19. <https://doi.org/10.1016/j.appdev.2017.02.002>

42. Nesi, J., & Infante, M. (2023). Social media for mental health and well-being: A meta-analysis of gender and popularity moderate associations with depression symptoms. *Journal of Abnormal Child Psychology*, 43(8), 1427-1438. <https://doi.org/10.1007/s10802-015-0020-0>

43. Padín, P. F., González-Rodríguez, R., Verde-Diego, C., & Vázquez-Pérez, R. (2021). Social media and eating disorder psychopathology: A systematic review. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 15(3), Article 6. <https://doi.org/10.5817/CP2021-3-6>

44. Fioravanti, G., Bocci Benucci, S., Ceragioli, G., & Casale, S. (2022). How the exposure to beauty ideals on social networking sites influences body image: A systematic review of experimental studies. *Adolescent Research Review*. Advance online publication. <https://doi.org/10.1007/s40894-022-00179-4>

45. Kleemans, M., Daalmans, S., Carbaat, I., & Anschütz, D. (2018). Picture perfect: The direct effect of manipulated Instagram photos on body image in adolescent girls. *Media Psychology*, 21(1), 93-110. <https://doi.org/10.1080/15213269.2016.1257392>

46. Maheux, A. J., Roberts, S. R., Nesi, J., Widman, L., & Choukas-Bradley, S. (2022). Longitudinal associations between appearance-related social media consciousness and adolescents' depressive symptoms. *Journal of Adolescence*, 94(2), 264-269. <https://doi.org/10.1002/jad.12009>

47. Common Sense Media. (2019, May 10). *Digital citizenship* | Common Sense Education. <https://www.commonsense.org/education/digital-citizenship>

48. Magis-Weinberg, L., Muñoz Lopez, D. E., Gys, C. L., Berger, E. L., & Dahl, R. E. (2022). Short research article: Promoting digital citizenship through a school-based intervention in early adolescence in Perú (a pilot quasi-experimental study). *Child and Adolescent Mental Health*. Advance online publication. <https://doi.org/10.1111/camh.12625>

49. Balt, E., Mérelle, S., Robinson, J., Popma, A., Creemers, D., van den Brand, I., van Bergen, D., Rasing, S., Mulder, W., & Gilissen, R. (2023). Social media use of adolescents who died by suicide: Lessons from a psychological autopsy study. *Child and Adolescent Psychiatry and Mental Health*, 17(1), 48. <https://doi.org/10.1186/s13034-023-00597-9>

50. Choukas-Bradley, S., Kilic, Z., Stout, C. D., Roberts, S.R. (2023). Perfect storms and double-edged swords: Recent advances in research on adolescent social media use and mental health. *Advances in Psychiatry and Behavioral Health*. Advance online publication. <https://doi.org/10.1016/j.ypsc.2023.03.007>

Date created: May 2023



Advancing psychology to benefit society and improve lives

ABOUT PSYCHOLOGY

Science of Psychology

Psychology Topics

STUDENTS

Accredited Psychology Programs

Careers in Psychology

Online Psychology Laboratory

More for Students

PUBLICATIONS & DATABASES

APA Style

Books

Children's Books

Databases

DVD/Streaming Video

Journal Subscriptions

APA PsycNET® Journal Articles

More Publications & Databases

NEWS & ADVOCACY

Monitor on Psychology Magazine

Newsletters

Press Room

Advocacy from APA Services, Inc.

STANDARDS & GUIDELINES

Standards and Guidelines

Ethics

CAREERS

Find a Job with PsycCareers

Early Career Psychologists

EVENTS & TRAINING

APA Annual Convention

Continuing Education

Events Calendar

Training

[Governance](#)[APA Merch Store](#)[Work at APA](#)[Get Involved](#)[RENEW MEMBERSHIP](#)[APA Divisions](#)[Corporate Supporters](#)[Donate](#)[Membership Benefits](#)[Directorates and
Programs](#)[Advertise with Us](#)[Contact Us](#)[More for Members](#)[JOIN APA](#)[Cookies](#) [Privacy Statement](#) [Terms of Use](#) [Accessibility](#) [Website Feedback](#) [Sitemap](#)**FOLLOW APA****© 2024 American Psychological Association**

750 First St. NE, Washington, DC 20002-4242

Telephone: (800) 374-2721; (202) 336-5500 | TDD/TTY: (202) 336-6123